

## **ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE**

### **HEAD 708 – CAPITAL SUBVENTIONS AND MAJOR SYSTEMS AND EQUIPMENT**

#### **Education Subventions**

#### **37EC – A private independent school (secondary-cum-primary) in Area N4b, Discovery Bay**

Members are invited to recommend to Finance Committee the upgrading of **37EC** to Category A at an estimated cost of \$137.0 million in money-of-the-day prices for the construction of a private independent school comprising a 30-classroom secondary section and an 18-classroom primary section in Area N4b, Discovery Bay.

#### **PROBLEM**

We need to provide more diversity in our school system and give parents more choices in the selection of schools for their children.

#### **PROPOSAL**

2. The Secretary for Education and Manpower (SEM), on the advice of the Director of Architectural Services (D Arch S), proposes to upgrade **37EC** to Category A at an estimated cost of \$137.0 million in money-of-the-day (MOD) prices for the construction of a non-profit-making private independent school (PIS) comprising a 30-classroom secondary section and an 18-classroom primary section in Area N4b, Discovery Bay.

3. The construction cost of the school premises is estimated to be \$225.0 million in MOD prices, comprising \$137.0 million of government subvention and \$88.0 million to be borne by the school sponsor. The amount of government subvention, being no more than the cost of constructing standard design public sector schools accommodating the same number of students, will be provided in the form of a capital grant to the school sponsor for the sole purpose of building the school. The school sponsor will be responsible for the design and construction of the school to meet its own curriculum needs.

### PROJECT SCOPE AND NATURE

4. The proposed school will adopt a non-standard design with the following planned facilities -

	<b>Secondary section</b>	<b>Primary section</b>
(a) classrooms;	30	18
(b) special rooms;	21	3
(c) staff rooms;	14	1
(d) staff common rooms;	1	1
(e) assembly halls;	1	1
<b>Shared facilities</b>		
(f) small group teaching rooms;		2
(g) guidance activity rooms;		2
(h) student activity centre;		1
(i) conference room;		1
(j) library;		1
(k) multi-purpose area;		1

- |  |           |
|--|-----------|
| (l) green corner <sup>1</sup> ;  | 1         |
| (m) swimming pool; and   | 1         |
| (n) ancillary accommodation including two lifts and relevant facilities for the handicapped. | Available |

To provide an area with moderate temperature for outdoor educational activities for students throughout the year, the proposed PIS will provide a rooftop structure in the form of a canopy and the construction cost of \$26.8 million will be fully funded by the school sponsor. Due to site constraints, the school premises cannot accommodate a running track. A comparison of the facilities proposed under 37EC with those at standard design schools is at Enclosure 1.

5. The proposed school will meet the planning target of providing two square metres of open space per student. A site plan is at Enclosure 2 and views of the school premises (artist's impression) are at Enclosure 3. Subject to approval of the capital grant by Finance Committee, the school sponsor plans to start the construction works in March 2006 for completion in August 2007.

## JUSTIFICATION

6. The proposed through-train school will assume students of continuous progression in their learning through their school years from ages 5 to 18. The proposed school will offer a curriculum based on the International Baccalaureate (IB) programmes of Primary Years Programme, Middle Years Programme and Diploma Programme that are expanding rapidly around the world. Subject to authorization by the International Baccalaureate Organisation, the school will become one of the few schools in Hong Kong providing all of the three IB programmes at the same time.

7. While offering its students an international dimension and using English as the medium for teaching and learning, the school will instill into the curriculum a very strong emphasis on Chinese language and culture. Generally, all students are expected to learn Putonghua and standard Chinese. Capitalising

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<sup>1</sup> The green corner is a designated area inside the campus to enable students to develop an interest in horticulture and the natural environment. The green corner may include a green-house, a weather station and planting beds.

on its rich experience in school operation in Hong Kong, the school sponsor will continue to promote co-curriculum activities and there will be a variety of clubs for music, drama, dance, sports and debates that promote students' excellence.

8. Since the school will be recruiting students from all over the territory and operating on a self-financing basis, its operation will only have a marginal impact on the supply and demand balance of public sector school places in Islands District. Nonetheless, for background information, the Islands District may have a projected shortfall of 70 secondary classes and 35 primary classes by the 2008/09 school year. Through serving primarily local students as required of all PISs, the school, with its non-local curriculum, will offer the expatriate community a choice outside the international sector. It will increase the capacity of our school sector in catering to the needs of investors and executives from overseas.

## FINANCIAL IMPLICATIONS

9. The capital grant for the PIS, calculated on the basis of the reference cost of a standard design 30-classroom public sector secondary school and the reference cost of a standard design 18-classroom public sector primary school, is \$137.0 million in MOD prices (see paragraph 12 below). The reference costs are based on an uncomplicated site with no unusual environmental or geotechnical constraints. The amount of capital grant is calculated as follows –

	<b>\$ million</b>
(a) Secondary section	71.8
<p>The cost of building a standard design 30-classroom secondary school with 1 160 students is \$99.2 million in September 2005 prices, as advised by D Arch S. The equivalent provision for the 30-classroom secondary section with 840 students<sup>2</sup> will be \$71.8 million.            (\$99.2 million ÷ 1 160 x 840)</p>	
	/(b) .....

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<sup>2</sup> The secondary section will have 20 classes of 30 students (year 7 to 11) and 10 classes of 24 students (year 12 to 13). The total number of students is 840.

\$ million

(b) Primary section 60.7

The cost of building a standard design 18-classroom primary school with 621 students is \$69.8 million in September 2005 prices, as advised by D Arch S. The primary section is designed for 540 students<sup>3</sup>. The equivalent provision for the primary section will be \$60.7 million.

(\$69.8 million ÷ 621 x 540)

(c) Construction Waste Disposal Charging Scheme<sup>4</sup> 1.1

(d) Consultants' fees 3.2

Having examined and revised the consultants' fees estimated by the school sponsor, D Arch S considers the figures acceptable. For schools built by the Government, such services are arranged through the Architectural Services Department.

	Sub-total	136.8	(in September 2005 prices)
(e) Provisions for price adjustment		0.2	
	Total	137.0	(in MOD prices)

A detailed breakdown of the estimate for consultants' fees by man-months is at Enclosure 4.

10. The school sponsor estimates the construction cost of the school to be \$225.0 million in MOD prices (see paragraph 12 below). D Arch S has examined and endorsed the cost estimate, made up as follows –

/(a) .....

<sup>3</sup> The primary section will have 18 classes of 30 students each for primary 1 to 6. The total number of students is 540.

<sup>4</sup> This is a new requirement under the Waste Disposal Charging Scheme which came into operation on 1 December 2005. Disposal of construction waste will be charged at a fixed rate.

		<b>\$ million</b>	
(a) Foundation		19.7	
(b) Building		124.3	
(c) Building services		40.9	
(d) Drainage		3.2	
(e) External works		11.9	
(f) Consultants' fees for –		4.3	
	(i) Contract administration	2.9	
	(ii) Site supervision	1.0	
	(iii) Out-of-pocket expenses	0.4	
(g) Contingencies		20.4	
	Sub-total	224.7	(in September 2005 prices)
(h) Provisions for price adjustment		0.3	
	Total	<u>225.0</u>	(in MOD prices)

11. As the estimated construction cost of the PIS (\$225.0 million in MOD prices) is higher than the capital grant (\$137.0 million in MOD prices), the difference (\$88.0 million) will be borne by the school sponsor. The capital grant provided by the Government will be capped at \$137.0 million in MOD prices. The school sponsor will be responsible for all additional funding requirements, whether due to higher-than-expected tender outturn or other variations. The Government and the school sponsor will share all savings arising from lower-than-expected tender outturn on a pro-rata basis of their estimated contribution to the project (i.e. 69.1 % for the Government and 30.9% for the school sponsor).

12. Subject to approval, the school sponsor will phase the expenditure as follows –

Year	\$ million (Sept 2005)		Price adjustment factor	\$ million (MOD)	
	Capital grant under 37EC	Construction cost		Capital grant under 37EC	Construction cost
2005 – 06	0.0	6.9	1.00000	0.0	6.9
2006 – 07	77.9	158.9	1.00125	78.0	159.1
2007 – 08	53.4	53.4	1.00125	53.5	53.5
2008 – 09	5.5	5.5	1.00125	5.5	5.5
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	136.8	224.7		137.0	225.0

13. We have derived the MOD estimate on the basis of Government's latest forecast of trend rate of change in the prices of public sector building and construction output for the period 2005 to 2009. The school sponsor will deliver the works through a fixed-price lump-sum contract because it can clearly define the scope of works in advance. The contract will not provide for price adjustment because the contract period will not exceed 21 months.

14. The cost of furniture and equipment and the recurrent expenditure for the school will be borne by the school sponsor. There will not be any recurrent expenditure for the Government. These arrangements are in line with the existing policy.

## **PUBLIC CONSULTATION**

15. We consulted the Islands District Council on **37EC** in March 2003. Members of the Council supported the project.

16. The Legislative Council Panel on Education discussed the policy on land and financial assistance for PIS in March 1999. Members supported the policy designed to foster the growth of a quality private school sector. We also consulted the Legislative Council Panel on Education on 24 October 2005 on our recent review of projects under planning in the School Building Programme. The Panel noted our recommendation to proceed with three allocated PIS projects, including the current proposal, in order to meet the demand from expatriate students as more multinational firms are established in Hong Kong, and to

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provide choice for local parents who seek non-mainstream curriculum. We also circulated to the Panel an information note on this project on 12 December 2005. We have not received any adverse comment.

## **ENVIRONMENTAL IMPLICATIONS**

17. The school sponsor engaged a consultant to conduct a Preliminary Environmental Review (PER) for **37EC** in March 2002. The PER concluded that adverse environmental impacts (including traffic noise and vehicular emissions) are not anticipated. However, the school is designed with air-conditioning system and well gasketed windows glazing in order to provide a comfortable indoor environment for students and staff. This will also minimize noise extrusion to surrounding residential areas. The school sponsor will bear the cost for the facility.

18. During construction, the school sponsor will control noise, dust and site run-off nuisances to within established standards and guidelines through the implementation of mitigation measures in the relevant contracts. These include the use of silencers, mufflers, acoustic lining or shields for noisy construction activities, frequent cleaning and watering of the site, and the provision of wheel-washing facilities.

19. The sponsor has considered measures to reduce the generation of construction and demolition (C&D) materials. It has introduced more pre-fabricated building elements into project designs to reduce temporary formwork and construction waste. These include prefabricated and modular cabinetry, proprietary fittings and fixture. In addition, the school sponsor will require the contractor to reuse inert C&D materials e.g. excavated soil, on site or in other suitable construction sites as far as possible in order to minimize the disposal of C&D materials to public fill reception facilities. The school sponsor will encourage the contractor to maximize the use of recycled or recyclable C&D materials, as well as the use of non-timber formwork to further minimize the generation of construction waste.

20. The school sponsor will require the contractor to submit a waste management plan (WMP) for approval. The WMP will include appropriate mitigation measures to avoid, reduce, reuse and recycle C&D materials. The school sponsor will ensure that the day-to-day operations on site comply with the approved WMP. The school sponsor will control the disposal of public fill, C&D materials and C&D waste to public fill reception facilities, sorting facilities and landfills respectively through a trip-ticket system. The school sponsor will require the contractor to separate public fill from C&D waste for disposal at appropriate

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facilities. The school sponsor will record the disposal, reuse and recycling of C&D materials for monitoring purposes. It estimates that the project will generate about 22 950 tonnes of C&D materials. Of these, the school sponsor will deliver 14 100 tonnes (61%) to public fill reception facilities<sup>5</sup> for subsequent reuse, and 4 500 tonnes (20%) to sorting facilities<sup>5</sup> in order to retrieve the inert portion for reuse as public fill. In addition, the school sponsor will dispose of 4 350 tonnes (19%) at landfills. The total cost for accommodating C&D materials at public fill reception facilities and landfill sites, together with the cost for handling the materials at sorting facilities is estimated to be \$1.4 million for this project (based on an unit cost of \$27/tonne for disposal at public fill reception facilities, \$100/tonne at sorting facilities and \$125/tonne<sup>6</sup> at landfills).

## LAND ACQUISITION

21. The project does not require land acquisition.

## BACKGROUND INFORMATION

22. We upgraded **37EC** to Category B in October 2002. The school sponsor engaged consultants to carry out the PER in March 2002, topographical survey in December 2002, site investigation in January 2003, and detailed design in November 2003 and tender documentation in January 2004 for the project. The costs for the above services amount to \$6.5 million. We will charge the Government contribution of \$5.0 million to block allocation **Subhead 8100QX** "Alterations, additions, repairs and improvements to education subvented buildings". The consultants have completed all services except for the preparation of tender documents which are being finalised.

23. To facilitate the development of a vibrant private school sector, Government has since 1999 been providing land grants at nominal premium to school sponsors for operating PISs. A capital grant, the amount being no more than the cost for constructing a standard design public sector school

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<sup>5</sup> Sorting facilities and public fill reception facilities are specified in Schedule 3 and Schedule 4 respectively of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation. Disposal of public fill in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

<sup>6</sup> This estimate has taken into account the cost for developing, operating and restoring the landfills after they are filled and the aftercare required. It does not include the land opportunity cost for existing landfill sites (which is estimated at \$90/m<sup>3</sup>), nor the cost to provide new landfills, (which is likely to be more expensive) when the existing ones are filled.

accommodating the same number of students, will also be provided to the school sponsors for the sole purpose of building the schools. The financial assistance and the provision of land at nominal premium will help high quality non-profit-making school operators overcome a major hurdle for entry. In addition, the assistance will give school sponsors incentives to charge affordable school fees. In each school year, the school is required to set aside a sum, which will not be less than 10% of its total school fee income, to provide scholarship and other financial assistance for deserving students. Apart from the capital grant, PISs will not receive any recurrent or further capital financial assistance from Government. They enjoy greater autonomy in resource management and curriculum. While serving primarily the local community (a PIS has to reserve 70% of its places for local students), PISs have capacity to serve non-local students given the flexibility in curriculum design.

24. In choosing the school sponsors for PISs, the School Allocation Committee<sup>7</sup> would invite parties interested in operating PISs to submit proposals. Selected non-profit-making PISs would usually be granted school sites by private treaty<sup>8</sup>. To enhance the accountability of the PISs in delivering education in exchange for government assistance, and to facilitate the development of performance-based school management, the school sponsors of PISs are required to sign a ten-year service agreement with the Government. The agreement will confirm the objective of providing quality education in accordance with the prevailing approved education policies. Renewal of the service agreement upon its expiry will be subject to an evaluation with reference to the performance targets stated in the agreement. In the case of non-renewal or termination of the service agreement, SEM may allocate the school to a new school sponsor or

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<sup>7</sup> The School Allocation Committee makes recommendations to Permanent Secretary for Education and Manpower on the allocation of school premises/sites to suitable school sponsors through an open and competitive selection process. The Committee comprises an equal number of official and non-official members familiar with the Hong Kong education system.

<sup>8</sup> In this particular case, the subject site is a designated school site under the comprehensive Discovery Bay development. Upon the request of Director of Lands, the developer i.e. Hong Kong Resort Company Limited, will assign the site to Financial Secretary Incorporated and then let to the school sponsor by means of a Lease prepared by the Government Property Agency at a nominal rental of \$1,000.

temporarily take over the school. With only a very limited number of PISs<sup>9</sup> at the initial stage of development, provision of school places in these schools is not at present counted towards the projected supply of school places. When we have a better picture of the enrolment trend for these schools, say three to five years upon completion of these projects, we shall review how PIS places should be taken into account in planning the supply of school places.

25. The proposed construction of the school will not involve any tree removal proposal. The school sponsor will incorporate planting proposal as part of the project, including estimated quantities of 47 trees and 135m<sup>2</sup> shrubs.

26. We estimate that the proposed works will create about 240 jobs (215 for labourers and another 25 for professional/technical staff) providing a total employment of 4 300 man-months.

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Education and Manpower Bureau  
January 2006

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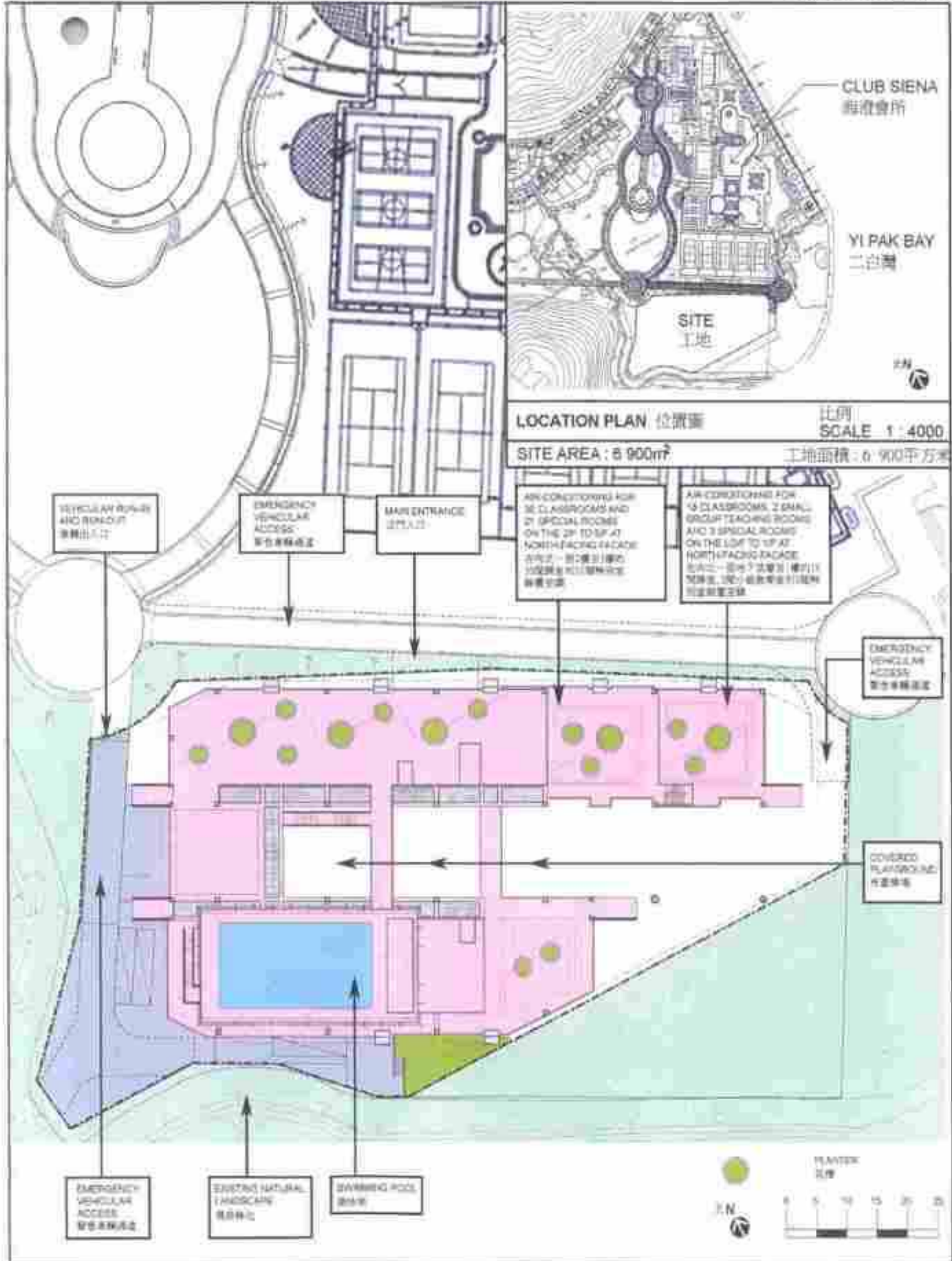
<sup>9</sup> Up to now, we have upgraded the following PIS projects to Category A –

<b>Project code</b>	<b>Project title</b>	<b>Upgrading date</b>
<b>29EC</b>	A private independent school at Po Kong Village Road, Wong Tai Sin	March 2002 (the school started operation in September 2004)
<b>39EC</b>	A private independent school (secondary-cum-primary) in Area 90B, Ma On Shan	July 2003
<b>44EC</b>	A private independent school (secondary-cum-primary) at Shum Wan Road, Aberdeen	July 2004
<b>46EC</b>	A private independent school (secondary-cum-primary) at Kong Sin Wan Tsuen, Pok Fu Lam	December 2004
<b>87EB</b>	A private independent secondary school at Norfolk Road, Kowloon Tong	January 2005
<b>54EC</b>	A private independent school (secondary-cum-primary) in Area 11, Sha Tin	June 2005

**37EC – A private independent school (secondary-cum-primary)  
in Area N4b, Discovery Bay**

**A comparison of the facilities proposed under 37EC with those at standard design schools**

Facilities	37EC		Standard design school	
	30-classroom secondary section	18-classroom primary section	30-classroom secondary school	18-classroom primary school
Classroom	30	18	30	18
Special room	21	3	16	6
Staff room	14	1	1	1
Staff common room	1	1	1	1
Assembly hall	1	1	1	1
Small group teaching room		2	3	3
Guidance activity room		2	1	1
Student activity centre		1	1	1
Conference room		1	1	1
Library		1	1	1
Multi-purpose area		1	1	1
Green corner		1	1	1
Swimming pool		1	-	-
Ancillary accommodation, including lifts and relevant facilities for the handicapped		Available	Available	Available

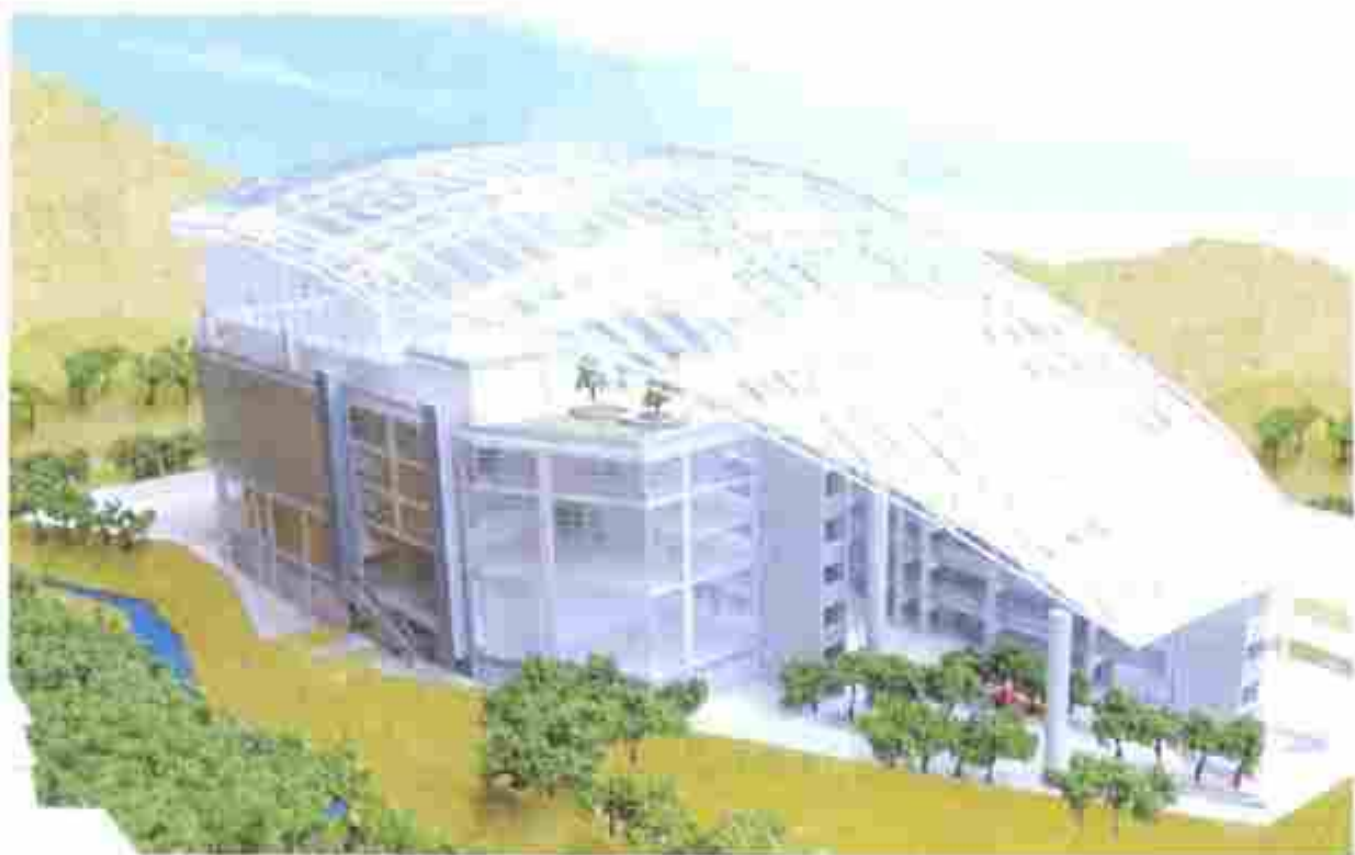


**37EC - A PRIVATE INDEPENDENT SCHOOL (SECONDARY-CUM-PRIMARY) IN AREA N4b, DISCOVERY BAY**  
 愉景灣第N4b區的1所私立獨立學校(中學兼小學)



從東面望向校舍的構思圖

VIEW OF THE SCHOOL PREMISES FROM EASTERN DIRECTION (ARTIST'S IMPRESSION)



從南面望向校舍的構思圖

VIEW OF THE SCHOOL PREMISES FROM SOUTHERN DIRECTION (ARTIST'S IMPRESSION)

**37EC - A PRIVATE INDEPENDENT SCHOOL  
(SECONDARY - CUM - PRIMARY) IN AREA N4b, DISCOVERY BAY**  
愉景灣第N4b區的1所私立獨立學校(中學暨小學)

## Enclosure 4 to PWSC(2005-06)43

### 37EC – A private independent school (secondary-cum-primary) in Area N4b, Discovery Bay

#### Breakdown of the estimate for consultants' fees

		Estimated man-months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a) Consultants' staff cost					
(i) Contract administration <sup>(Note 2)</sup>	Professional	–	–	–	1.4
	Technical	–	–	–	0.8
(ii) Site supervision <sup>(Note 3)</sup>	Technical	24.29	14	1.6	0.7
Sub-total					2.9
(b) Out-of-pocket expenses <sup>(Note 4)</sup>					
Lithography and other direct expenses					0.3
Sub-total					0.3
Total					3.2

\* MPS = Master Pay Scale

#### Notes

1. A multiplier of 1.6 is applied to the average MPS point to estimate the resident site staff cost supplied by the consultants. (As at 1 January 2005, MPS point 14 is \$18,010 per month).
2. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement for the design and construction of 37EC. The assignment will only be executed subject to Finance Committee's approval to upgrade 37EC to Category A.
3. We will only know the actual man-months and actual costs for site supervision after completion of the works.
4. Out-of-pocket expenses are the actual costs incurred. The consultants are not entitled to any additional payment for overheads or profit in respect of these items.